PROJECT/ACTIVITY TITLE: Proposal to conduct mobile-loading operations of transuranic and mixed transuranic waste at Technical Area 55 Accession No: 23279

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PRID No: 17P-0209

PURPOSE: The Department of Energy/National Nuclear Security Administration (DOE/NNSA) proposes a new activity in TA-55 to use the Resource Conservation and Recovery Act-(RCRA) permitted outdoor storage pad and the High-Efficiency Neutron Center (HENC) pad area at TA-55 as staging areas for the loading of transuranic (TRU) and mixed transuranic (MTRU) waste waiting to be shipped to Waste Isolation Pilot Plant (WIPP). As inventory continues to increase, the available authorized storage area at TA-55 is reaching capacity for material-at-risk limits. The purpose of the proposed action is to reduce the inventory of TRU and MTRU waste drums at Los Alamos National Laboratory (LANL) and to approve a new TA-55 activity.

Location: The RCRA-permitted outdoor storage pad and the HENC pad area location within Technical Area 55 (TA-55) [See Figure 1].

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NATIONAL ENVIRONMENTAL POLICY ACT COVERAGE: Final Site-Wide Environmental Impact Statement for the Continued Operations of Los Alamos National Laboratory at Los Alamos, NM, DOE/EIS-0380, May 2008 (2008 SWEIS) and the following Records of Decision (ROD)

- ROD 1: Federal Register Vol. 73, No. 188, 55833 September 26, 2008
- ROD 2: Federal Register Vol. 74, No. 131, 33232 July 10, 2009

BACKGROUND

LANL operations at TA-55 result in the generation of TRU and MTRU wastes. There are two LANL facilities involved in the processing and packaging of TRU and MTRU waste: the Waste Compaction Reduction and Repackaging Facility and the Radioassay and Nondestructive Testing Facility. The Waste Compaction Reduction and Repackaging Facility received upgrades such as a new roof, new bay door, a large refrigerator to keep the waste cool, and electrical work and is not yet operational. Similarly, the Radioassay and Nondestructive Testing Facility is undergoing seismic upgrades and roof replacement and is not operational. Therefore, TA-55 has been authorized as a TRU and MTRU temporary storage area. TRU and MTRU are both managed for disposal at WIPP. However, as a result of the 2014 WIPP temporary shutdown, TRU and MTRU waste inventory continued to increase and is reaching storage capacity at TA-55. WIPP has now resumed operations which will enable LANL to resume shipping TRU and MTRU to WIPP for storage relief at TA-55. This situation has resulted in the need to have TRU and MTRU waste loading operations to be conducted at TA-55 for shipment to WIPP.¹

DESCRIPTION OF PROPOSED ACTION

The NNSA proposes a new activity in TA-55, but not to LANL, which is to prepare and load drums for shipment to WIPP. Loading operations would be conducted at the RCRA permitted outdoor storage pad and the HENC pad. Loading operations would be conducted by a mobile loading unit comprised of WIPP-certified subcontractors.² Loading operations would be conducted in a designated area adjacent to the HENC pad (Figure 1). The loading and shipping process will use Type B shipping containers (TRUPACT II or HalfPAC

¹ Temporary Safety Basis Modification Mobile Loading Unit (MLU) Operations, TMPMOD-TASS-490-R2, June 2017.

United States Department of Energy, DOE Awards Contract for WIPP Mobile Loading Unit Services, issued on August 27, 2012.

containers). Payloads of TRU and MTRU waste containers may consist of seven to 14 55-gallon drums, one or two standard waste boxes, or 10 drum overpacks. Los Alamos National Security, LLC (LANS) personnel are responsible to ensure that each TRU and MTRU waste container is certified to meet the WIPP waste acceptance criteria. The WIPP-certified subcontractor is responsible for loading TRU and MTRU waste containers into Type B shipping containers.



Figure 1. Location of the proposed mobile loading unit operations at TA-55

IMPACT ASSESSMENT

See Table 1 below for an assessment of potential impacts.

Table 1. Environmental Factors Checklist

Environmental Factor	Analysis
Land Use	No change to current conditions.
Visual	No change to current conditions

Overpacks are containers that are put around another container, i.e., 55-gallon drums or waste boxes. http://www.wipp.energy.gov/library/cpp/ten-drum%20overpack%20(tdop).htm, accessed on October 18, 2017.

Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant, DOE/WIPP-02-3122, rev. 8.0, effective date July 5, 2016.

Environmental Factor	Analysis
Geology and Soils (geologic hazards, soil productivity, capability, erodibility, and mass failure)	No change to current conditions.
Water (surface and groundwater quality and quantity, groundwater recharge, streamflow regimes)	No change to current conditions.
Non - radiological Air Quality	No change to current conditions.
Radiological Air Quality	No change to current conditions.
Noise	Localized and very minor increase in noise during loading.
Ecological (floodplains, wetlands, threatened or endangered species and habitat, migratory birds, exotic organisms)	No change to current conditions.
Human Health – Radiological Impacts on the Public	No change to current conditions.
Human Health – Chemical Impacts on the Public	No change to current conditions
Human Health – Worker Health	Standard practices that are protective of worker health and safety would apply.
Cultural Resources (archeological and historical)	No effect.
Socioeconomics	No change to current conditions.
Infrastructure (roads, utility corridors, communications systems, energy & fuels, distribution systems, and water)	No change to current conditions.
Waste Management	The Proposed Action is not anticipated to generate any new TRU and MTRU waste. Storing, moving, and staging TRU and MTRU waste at TA-55 is conducted according to requirements in LANL procedure P409, Waste Management; LANL procedure PD205, Nuclear Material Control and Accountability; and requirements in the LANL Nuclear Material Control and Accountability Program. The 2008 SWEIS analyzes the capability to store TRU and MTRU waste at authorized LANL facilities until shipment to WIPP. Therefore, the Proposed Action is bounded within the 2008 SWEIS.

Environmental Factor	Analysis
Transportation	Transportation of TRU and MTRU waste to WIPP is bounded within the 2008 SWEIS.
Environmental Justice	No change to current conditions.
Facility Accidents	Because the Proposed Action is a change in location for loading operations, a safety basis modification was prepared to analyze potential accidents for exposure to the public. The evaluated accidents remain bounded by the 2008 SWEIS for 1) a fire either initiated by operational events or lightning and 2) a seismic event. The temporary safety basis modification analyzed a pool fire o the HENC pad that resulted in a 205-rem-dose consequence. This HENC pad fire is bounded by the 2008 SWEIS accidents for the Radioassay and Nondestructive Testing Facility (410 rem) and the Waste Storage Dome Fire (420 rem). The seismic event analyzed for the Proposed Action resulted in a dose consequence of 138 rem. This seismic event is also bounded by the 200 SWEIS for site-wide seismic 2 events, for impacts from the Waste Storage Domes (460 rem), and at TA-55 building 4 (150 rem). Thus, the 2008 SWEIS continues to bound facility accidents.

CONCLUSION

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects or threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders. Based on this NEPA determination analysis; this project falls within the bounding analysis of the 2008 SWEIS and associated RODS. Consequently, no further NEPA analysis is necessary or required.

NEPA Determination

Based on my review of the Proposed Action, as the National Nuclear Security Administration's Los Alamos Field Office (NA-LA) NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the Proposed Action as described herein, is not a major Federal action nor differs substantially from the bounding analysis of the Final Site-Wide Environmental Impact Statement for the Continued Operations of Los Alamos National Laboratory at Los Alamos, NM, DOE/EIS-0380, May 2008 and the Records of Decision (ROD).

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects or threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or executive orders. If changes are made to the scope of the action so that it is no longer bounded by the enclosed description, or the project is changed to encompass other actions, NEPA requirements for the action would need to be reassessed at that time and further analysis may be required.

NA-LA NEPA Compliance Officer: Jane Summerson

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Date:

Signature:

10/26/17